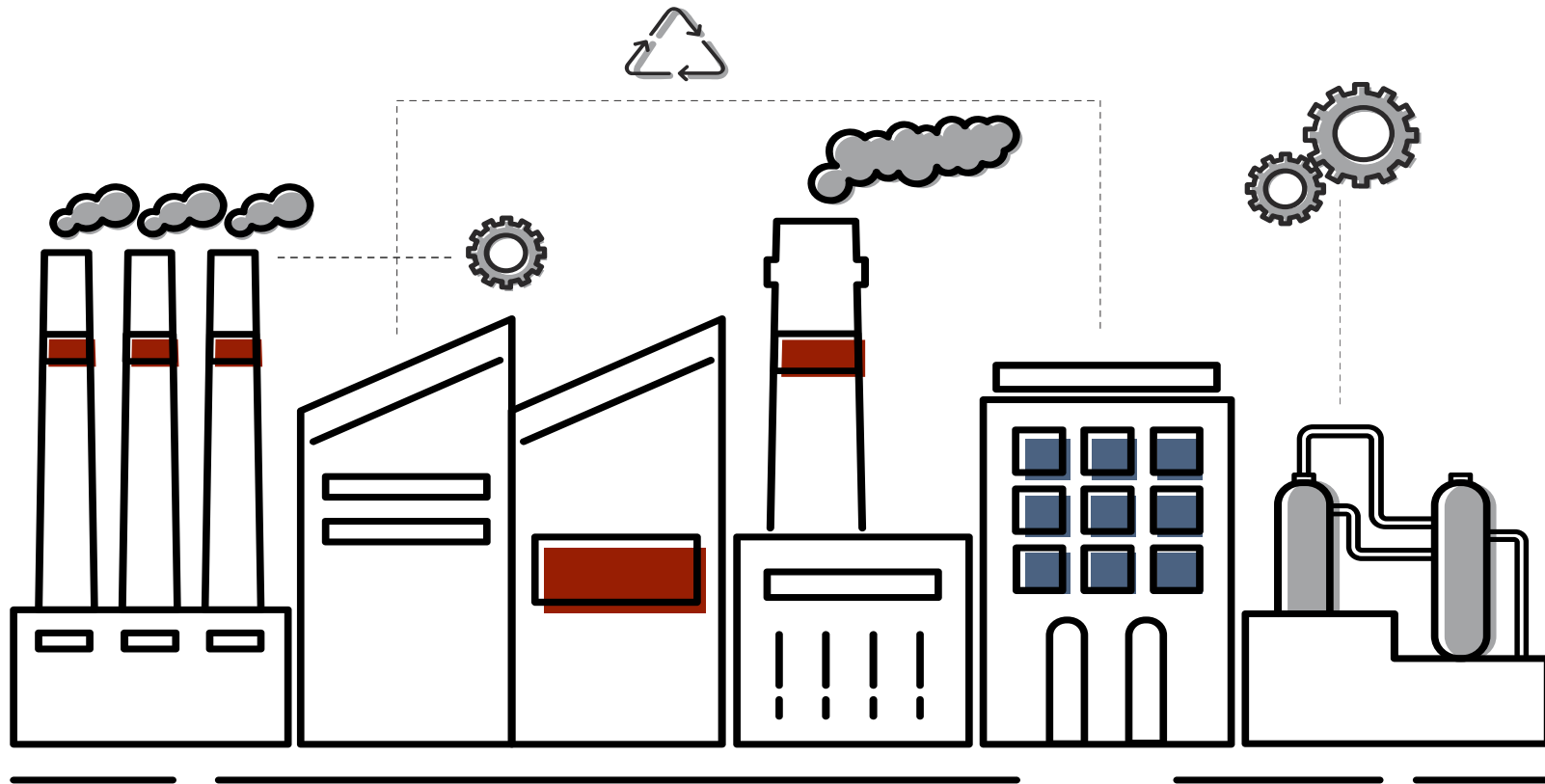


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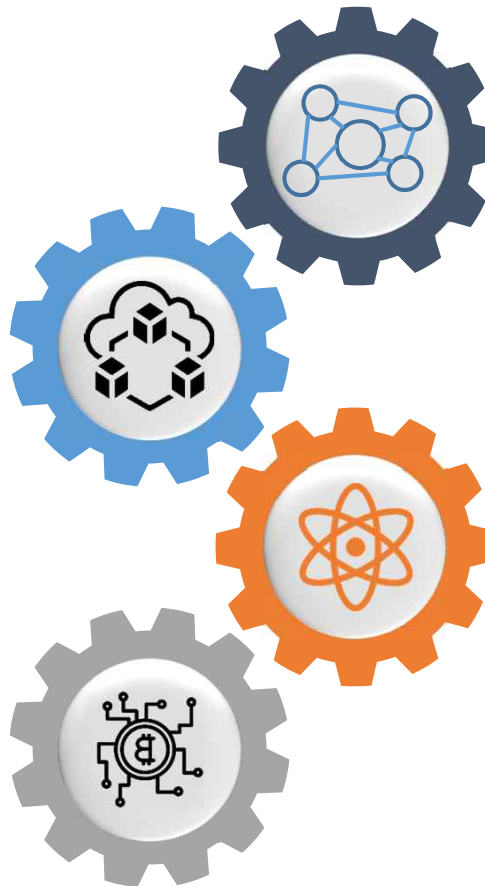
Industry 4.0

Big data

Big data represents the information assets characterized by such a high volume, velocity and variety to require specific technology and analytical methods for its transformation into value

Block chain

block chain, is a growing list of records, called blocks, which are linked using cryptography.



IoT

The Internet of things (IoT) is the network of physical devices, vehicles, home appliances, and other items embedded with electronics, software, sensors, actuators, and connectivity which enables these things to connect, collect and exchange data.

Convergence

The convergence of different ideas, groups, or societies is the process by which they stop being different and become more similar.

Preemptive
market response

Optimized
working rate

Save cost for
failure

Save cost

real-time management based on the data and predictability

Connection
(detection)



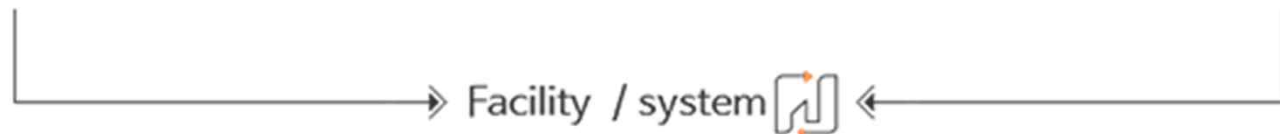
Analysis



Prediction



Execution



Facility / system



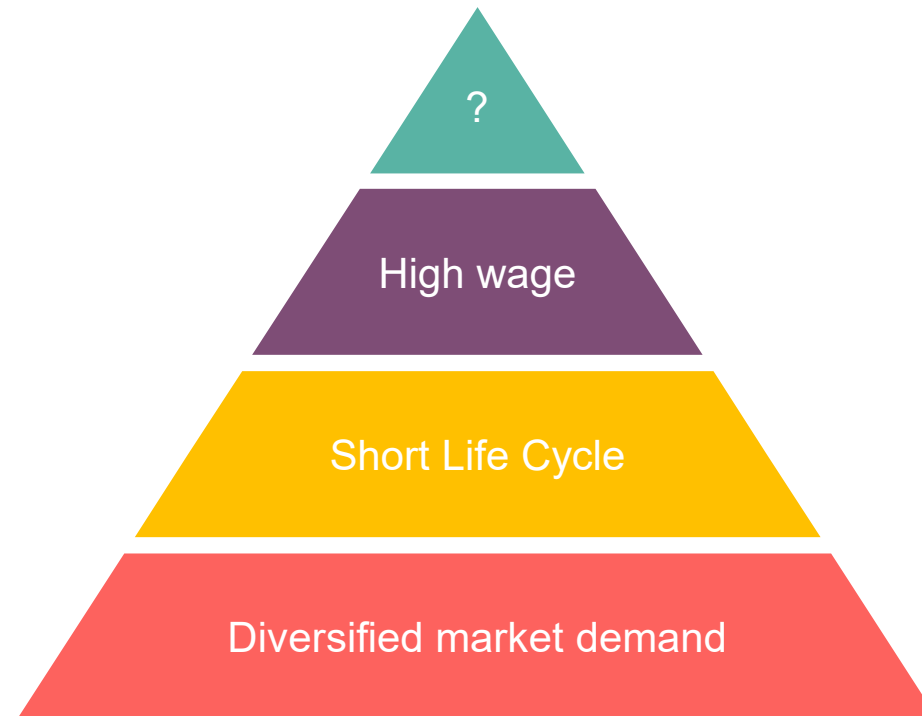
Material input
prediction

Production capacity
maximization

Facility failure
prediction

Flexible production
system

What is the problem?

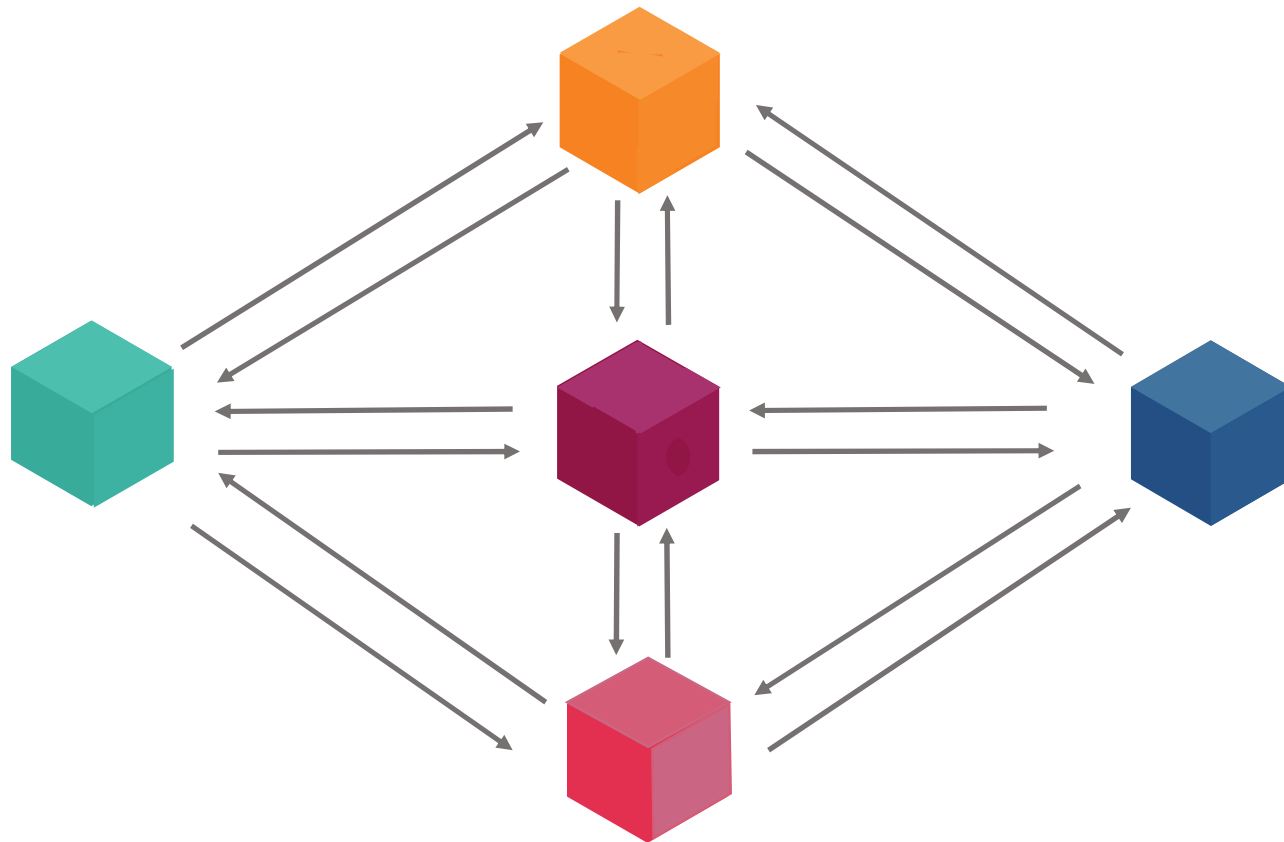


Trust Issue

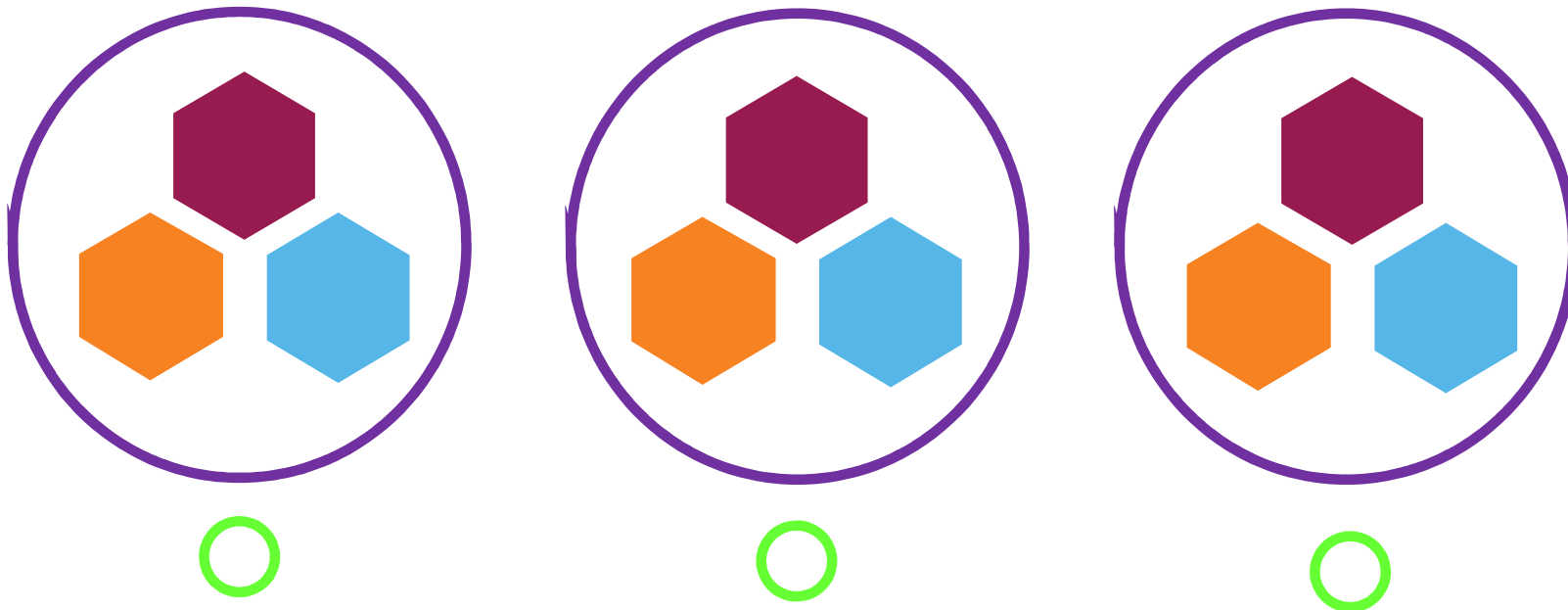




practical byzantine fault tolerance



Federated Byzantine Agreement



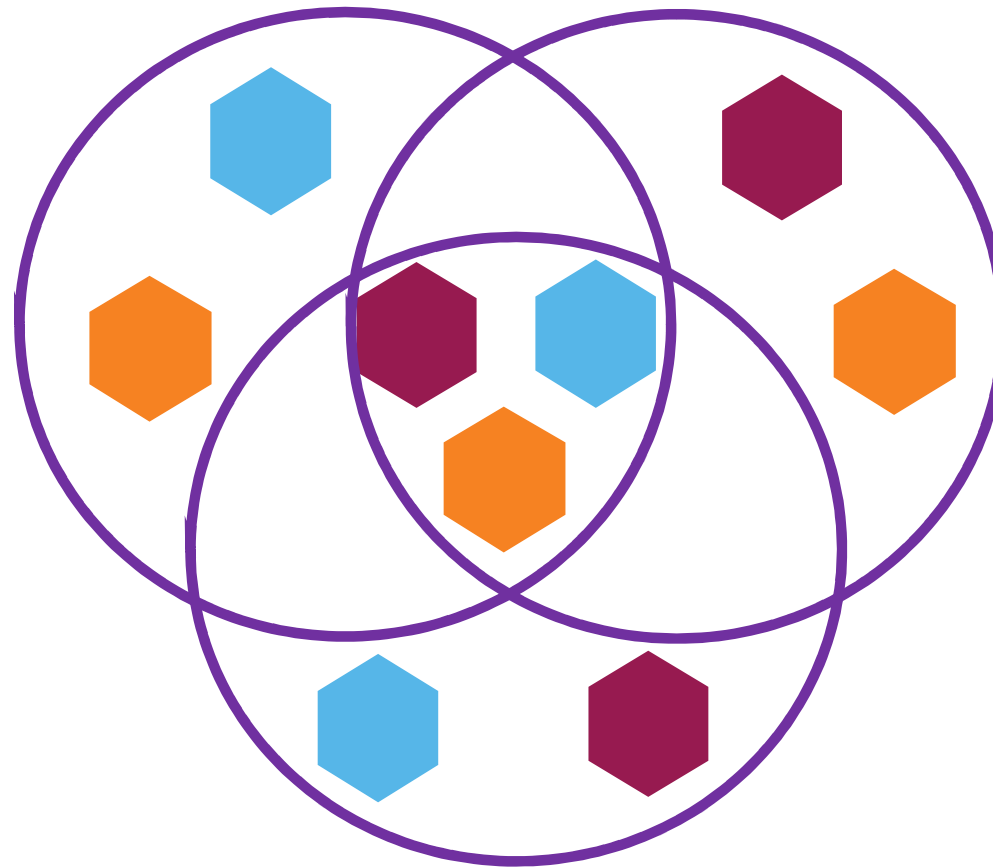
A Quorum slice.

Federated Byzantine Agreement



A Quorum slice.

Federated Byzantine Agreement



A Quorum Intersections.



What is Secure?

0

Malicious code

Malicious code is unwanted files or programs that can cause harm to a computer or compromise data stored on a computer. Various classifications of **malicious code** include viruses, worms, and Trojan horses

0

Vulnerability

a vulnerability is a weakness which can be exploited by a Threat Actor, such as an attacker, to perform unauthorized actions within a computer system.

0

Unauthorized access

Unauthorized access is when someone gains access to a website, program, server, service, or other system using someone else's account or other methods.



Computer security, cybersecurity, or IT security is the protection of computer systems from theft or damage to their hardware, software or electronic data, as well as from disruption or misdirection of the services they provide.

The field is of growing importance due to increasing reliance on computer systems, the Internet and wireless networks such as Bluetooth and Wi-Fi, and due to the growth of "smart" devices, including smartphones, televisions and the various tiny devices that constitute the Internet of Things. Due to its complexity, both in terms of politics and technology, it is also one of the major challenges of the contemporary world.

SMART FACTORIES OF THE FUTURE

